

REMARKS

Claims 21, 23-30 and 32-39 are pending in this application. Claims 21 and 24-26 have been allowed. By this Response, Applicant is amending claims 21, 23, 27, 29, 33, 34 and 35. Accordingly, claims 21, 23-30 and 32-39 are at issue. Applicant respectfully submits no new matter was added by these amendments.

Applicant has amended claim 21 to correct a spelling error changing the word “form” to “from” at two locations.

The Examiner has objected to claims 23, 27, 29, 30, 32 and 33 because of certain informalities. Applicant has amended the claims to overcome these informalities. Applicant respectfully submits these objections are now moot.

Applicant has canceled the words “further comprising” from claim 23.

Applicant has amended claim 27 to also include the diode in the external I/O module.

Applicant has amended claim 29 to place “said means for controlling the current source being coupled to the processor unit and the current source” to after introduction of “a processor.” Applicant believes this overcomes the antecedent basis problem identified by the Examiner and shows the processor of line 14 is the same as the processor formerly of lines 7-8. Applicant maintains this also overcomes the objection of claim 32 as being dependent upon an objected to claim.

The Examiner has maintained “it is not clear what element the ‘means for controlling the current source’ is referring to, e.g., is the means the processor itself?” According to the structure disclosed in the application for performing the “means for” limitations, the specification sets forth “[i]t is to be understood that any processor **or multiple processors** may be used to perform the functionality of the processor 312.” (Application, p. 9, lines 23-25). Therefore, claim 29 covers instances wherein “the processor unit” expressly recited in the claim is also the means for controlling the current source, or a separate processor is controlling the means for controlling the current source. This applies to claim 30 as well.

Applicant has amended claim 33 to replace “means for determining the temperature” with “the processor unit.” Applicant believes this overcomes the antecedent basis problem identified by the Examiner.

The Examiner has rejected claims 34-39 under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperation of elements. By this Response, Applicant has amended claim 34 to clarify and show the structural cooperation of the elements. Accordingly, Applicant respectfully maintains this rejection is now moot.

The Examiner has rejected claim 29 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,554,469 to Thomson et al. Applicant respectfully traverses this rejection. Applicant notes the Examiner has indicated claim 29 was allowable if written to overcome the objections set forth in the Office Action (see Detailed Action, paragraph 7). Applicant further notes the rejection based on Thomson specifically refers to method steps as those set forth in claim 28 (see Detailed Action, paragraph 5). Accordingly, Applicant will treat the above rejection as a typographical error and traverses the rejection of claim 28 based on Thomson.

Claim 28 is directed to a method that requires “sequentially digitizing the first and second analog voltage measurements in an integrated circuit comprising an analog-to-digital converter” and “providing a controller hosting a processor unit for controlling the current source and determining the temperature proximate the diode.” The Examiner has previously indicated that similar limitations in claims 21 and 29 distinguish the invention over both Auldy and Thomson (see prior Office Action, as well as paragraph 8 of the current Office Action). Accordingly, Applicant respectfully maintains claim 28 is also patentable over Thomson.

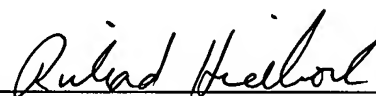
CONCLUSION

In light of the foregoing Amendments and Remarks, Applicant respectfully submits pending claims 21, 23-30, and 32-39 are in condition for allowance. The Examiner is invited to contact the undersigned if there are any questions concerning this Response.

The Commissioner is authorized to debit or credit Deposit Account No. 23-0280 for any payment **deficiencies or overpayments** associated with this matter.

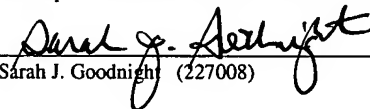
Respectfully submitted,

Dated: June 20, 2005

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on June 20, 2005.


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